



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,655	11/12/2005	Bjorn Jonsson	P16448-US1	6547
27045 7590 10/15/2007 ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024			EXAMINER DAGER, JONATHAN M	
			ART UNIT 3663	PAPER NUMBER
			MAIL DATE 10/15/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/556,655	JONSSON ET AL.	
	Examiner	Art Unit	
	Jonathan M. Dager	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments, see page 8, filed 02 August 2007, with respect to objection to the specification (spelling), have been fully considered and are persuasive. The objection to the specification (spelling), has been withdrawn.

Applicant's arguments, see page 8, filed 02 August 2007, with respect to the rejection of claim 9 under 35 U.S.C. 112, 2nd paragraph (indefinite), have been fully considered and are persuasive. The rejection of claim 9 under 35 U.S.C. 112, 2nd paragraph (indefinite), has been withdrawn.

Applicant's arguments, see pages 9-10, filed 02 August 2007, with respect to the rejection of claims 1-5 under 35 U.S.C. 102(b), have been fully considered and are persuasive. While the DeLorme reference may or may not have explicitly disclosed the embodiments of claim 1, the amended claim 1 clearly distinguishes itself over the prior art. Thus, the rejection of claims 1-5 under 35 U.S.C. 102(b), has been withdrawn. Further, all rejections of claims dependant from independent claim 1 have been withdrawn (claims 1-9).

However, due to the amendments to the claims, a new basis of rejection is warranted. See below.

Applicant's arguments, see pages 9-10, filed 02 August 2007, with respect to the rejection of claims 10-14 under 35 U.S.C. 102(b), have been fully considered and are not persuasive.

Applicant states that the DeLorme reference does not anticipate all of the embodiments of claims 10-14.

The Examiner respectfully disagrees; as stated in the non-final Office Action dated 03 May 2007, DeLorme discloses that a desktop application facilitates user selection of areas, starts, stops, destinations, maps and/or point and/or route information. It optionally includes supplemental online information, preferably for transfer to the PDA or equivalent device. Users' options include route information, area, and route maps. Maps and related route information are configured with differential detail and levels of magnitude. Used in the field, in conjunction with GPS receiver, the PDA device is configured to display directions, text and map formats, the user's current position, heading, speed, elevation, and so forth. Audible signals identifying the next turn along the user's planned route are also provided. The user can pan across maps and zoom between two or more map scales, levels of detail, or magnitudes. The IRMIS also provides for "automatic zooming," e.g., to show greater detail or closer detail as the user approaches a destination, or to larger scale and lower resolution to show the user's overall planned route between points of interest (abstract).

Additionally, Delorme discloses that the driver can opt between Multimedia and pure routing functions, as just discussed, are blended or integrated essentially by sequencing multimedia and routing operations under user control. Routing 205 plus

Art Unit: 3663

multimedia 209 subsystem operations, performed sequentially, produce combined or interactive output at step 265. The combined or interactive output typically includes a unique, customized or personalized travel plan provided in the form of map displays or hardcopy maps annotated with information about places, and travel directions, with the optimal computed route highlighted, labeled or otherwise marked. Users can opt to further embellish combined, interactive travel plan output with selected multimedia graphic images, videos, animations, sound or voice output as well as text, documents, numeric or tabular data about locations, POIs or points of interest or other geographic objects along the way, i.e., on or near the computed optimal route. One preferred form of such combined travel plan output is illustrated in FIG. 1N.

Thus, DeLorme indeed discloses a method for guiding a user in a vehicle which is capable of receiving information from a plurality of sources, processing the information, and presenting the information in multiple mediums (audibly and/or visibly), and therefore anticipates claims 10 and 11.

Regarding claims 12-14, Delorme discloses a scenario in which the user 103 has selected a particular lakeside location 124 on the underlying digital map, or in conjunction with a route or a waypoint along a route. The specific lakeside location 124 is shown as an "X" in a circle 124 on the simplified drawing of a typical digital map screen 122. The user 103 picked this point of interest located by a lake by means such as a mouse clicking operation at the location or place name as depicted on the digital map 122. The location can also be identified by words or symbols along a displayed

Art Unit: 3663

route on the underlying digital map screen 122, by selection from a list of place names or from a list of types of locations, or by other routine or state of the art inputs (Figure 1A, column 10, lines 3-15).

Regarding claim 17, DeLorme discloses that a stream of data at the bottom of the display indicates that you are receiving satellite information. The symbol in the upper right corner indicates your GPS status. A circle with a line through it means that DeLorme's GPS receiver has not been detected or you are not receiving enough information to determine a fix. The transmitting symbol indicates that DeLorme's GPS receiver is acquiring satellite information, but is not yet receiving sufficient satellite data to determine your position. This message is displayed while DeLorme's GPS receiver is acquiring satellite data and can take several minutes. "2-D" indicates that you are receiving data, but it is not sufficient to determine your elevation. "3-D" indicates that you are receiving ample data and have a good fix (column 19 lines 25-35).

Applicant's arguments, see pages 10-11, filed 02 August 2007, with respect to the rejection of claims 15-16 under 35 U.S.C. 103(a) as obvious in light of DeLorme, as modified by Buckham, have been fully considered and are not persuasive.

Applicant states that the Buckham reference fails to teach the limitation of a specification of a message using the information sources.

The Examiner respectfully disagrees; the Examiner relied upon the DeLorme reference to disclose the limitations of route determination, POI information, and a specification of a message using the information sources (see above).

The Examiner relies upon the Buckham to teach fleet management between vehicles.

Buckham discloses providing graphical location information such as the location of an individual (including one's self); a car, truck, boat or other vehicle; one or more vehicles of a fleet; and/or the location of a mobile unit such as a wireless telephone. Applications that make use of such location information include fleet management applications, applications for providing driving or walking instructions and applications for tracking moving vehicles.

In such applications, it is sometimes desirable to provide location information by way of a graphical display. Such a display may show the location of a mobile resource on a map of a surrounding area. The map may identify other requested location information, such as the location of a service provider of interest, for example, a hotel, restaurant or the like, in addition to the mobile resource location. Such graphical displays are useful because they allow a viewer to quickly ascertain a significant amount of location information. For example, a dispatcher or fleet manager may quickly ascertain the location of mobile resources of interest by viewing the display. Similarly, an individual may quickly determine how to drive or walk to an identified service provider location by viewing a map that identifies both the location of the individual and the service provider location. Accordingly, it is useful to provide a display that includes

Art Unit: 3663

at least mapping information and a marker, e.g., a cursor or other identifier, indicating the position of a mobile resource (column 1 lines 17-42).

Thus, DeLorme, as modified with the teachings of Buckham, teaches all embodiments of claims 15 and 16, and remains rejected under 35 U.S.C. 103 (a).

Applicant's arguments, see pages 10-11, filed 02 August 2007, with respect to the rejection of claim 18 under 35 U.S.C. 103(a) as obvious in light of DeLorme, as modified above by Buckham, and further in view of Ohmura, have been fully considered and are not persuasive.

The Applicant states that the previous references, as modified by Ohmura, do not teach the limitation of a specification of a message using the information sources cited.

The Examiner respectfully disagrees; the embodiment was disclosed above in the rejection of claims 10 and 17.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 3663

2. Claims 1, 2, 4, 5, and 7-9, are rejected under 35 U.S.C. 102(e) as being anticipated by Bickford et al. (US 2004/0236504).

Regarding claims 1, 4, and 7-9, Bickford discloses a vehicle navigation system which includes a navigation processor that is coupled to a GPS receiver and a user interface. Signals received from the GPS receiver allow the navigation processor to determine the vehicle position and then to calculate navigation solutions, for example, a route from the vehicle's present position to a selected destination, the proximity of POIs relative to the vehicle's present position, or the proximity of POIs relative to the selected destination. The navigation system may also include various interfaces for receiving data regarding POIs, for example, compact disc (CD), digital video disc (DVD), memory card, vehicle data bus, data communications, and wireless interfaces (para 0007).

Further, Bickford discloses that a navigation display which is capable of displaying navigation information including, for example, destination range and distance, POI direction and distance, turn-by-turn route guidance instructions, selectable POI categories, subcategories, and names of POIs (as shown, for example, in FIG. 5), function labels for programmable pushbuttons 15, etc. Various pushbuttons 13 and key matrix 14 provide user selection of audio entertainment and navigation system functions and provide for selection of displayed menu items and POI information items.

Programmable pushbuttons 15 vary in function depending on the selected display or menu, which may include function labels located on display 12 just above the individual programmable pushbuttons 15. CD/DVD receptacle 16 provides for the inserting and

Art Unit: 3663

expelling of removable media such as CDs and DVDs that may be used in connection with both the audio entertainment system and navigation system 10.

Also, figure 5 clearly anticipates the means for generating a specification to retrieve specific data. Figure 5 discloses an overview of an algorithm in which the user can select eating arrangements based on stored or wirelessly received POI data. Additionally, Figure 1 clearly shows the presentation means in a visual display format.

Drawings and pictures can anticipate claims if they clearly show the structure which is claimed. See MPEP 2125.

Next, Bickford discloses that the vehicle speakers 30 are driven by radio/audio processor 28 and may be used not only for audio entertainment listening, but also for audible alerts and voice information and prompts commanded by navigation processor 20 (para 0038). It is well known to those of ordinary skill in the art that many such personal navigation units contain user defined preferences, such as receiving directional information audibly as well as visually.

Lastly, Bickford discloses a priority system in which an alert is sounded and/or displayed by the navigation system if the vehicle's present position and a preferred POI are found to be within the predetermined location relative to the vehicle's present position. If the user selects a POI, the navigation system calculates an intermediate route from the vehicle's present position to the selected POI (para 0010). Additionally, the navigation system is capable of monitoring the vehicle condition and, if vehicle

Art Unit: 3663

service is advisable, can locate nearby POIs providing the required service and calculate a route to a selected POI (para 0011).

For example, the user may select the category gas stations, or brand name Big Tank as a preferred visitation point for which an alert that will become active upon navigation processor 20 receiving data from vehicle bus interface 42 indicating that the vehicle fuel tank is below one-eighth of a tank (para 0062).

Regarding claim 2, it is inherent that the system of Bickford would transcode the messaging information into the audio/visual formats listed above. Otherwise, the data would be unintelligible and of no use to the user.

3. As to limitations which are considered to be inherent in a reference, see MPEP 2112.01.

Regarding claim 5, Bickford discloses that the navigation system 10 may perform many navigation-related functions, such as those known in the art. For example, referring to FIG. 3, navigation system 10 may be operated by a user to determine a route between departure point 60, which may be the present position of vehicle 1, to a selected destination 62. Navigation system 10 may provide such information regarding the calculated route such as, for example, distance, direction, and name of destination 62, as shown in the upper portion of display 12 in FIG. 1. Navigation system 10 may also provide navigation assistance such as, for example, audible or displayed details of

Art Unit: 3663

first road 65, the present distance from and turn required at intersection 67, and the distance along second road 66 from intersection 67 to destination 62 (para 0043).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bickford et al. (US 2004/0236504), as applied to claim 1 above, and further in view of DeLorme et al. (US 6,321,158).

Regarding claim 3, Bickford does not explicitly disclose wherein the means for outputting information comprises a means for replacing the information object by a stored abstraction of the object from a symbol database.

6. DeLorme, however, teaches a scenario in which the user 103 has selected a particular lakeside location 124 on the underlying digital map, or in conjunction with a route or a waypoint along a route. The specific lakeside location 124 is shown as an "X" in a circle 124 on the simplified drawing of a typical digital map screen 122. The user 103 picked this point of interest located by a lake by means such as a mouse clicking operation at the location or place name as depicted on the digital map 122. The location can also be identified by words or symbols along a displayed route on the underlying digital map screen 122, by selection from a list of place names or from a list of types of

Art Unit: 3663

locations, or by other routine or state of the art inputs (Figure 1A, column 10, lines 3-15).

Thus, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the system of Bickford with the teachings of DeLorme to provide a means for replacing the information object by a stored abstraction of the object. Doing so would more easily identify the information object.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bickford et al. (US 2004/0236504) as modified by DeLorme et al. (US 6,321,158), and further in view of Buckham et al. (US 6,662,016)

Bickford discloses the target information object being a POI, but does not explicitly state that an information object can be another vehicle, and that the route between the two can be displayed.

DeLorme teaches an integrated mapping system wherein POIs are graphically displayed on the portable navigation unit, but does not explicitly teach that another vehicle can be an information object.

Bickford, as modified by DeLorme, does not explicitly teach all of the embodiments of claim 6, especially the target being another vehicle.

8. Buckham, however, teaches providing graphical location information such as the location of an individual (including one's self); a car, truck, boat or other vehicle; one or more vehicles of a fleet; and/or the location of a mobile unit such as a wireless telephone. Applications that make use of such location information include fleet

Art Unit: 3663

management applications, applications for providing driving or walking instructions and applications for tracking moving vehicles.

In such applications, it is sometimes desirable to provide location information by way of a graphical display. Such a display may show the location of a mobile resource on a map of a surrounding area. The map may identify other requested location information, such as the location of a service provider of interest, for example, a hotel, restaurant or the like, in addition to the mobile resource location. Such graphical displays are useful because they allow a viewer to quickly ascertain a significant amount of location information. For example, a dispatcher or fleet manager may quickly ascertain the location of mobile resources of interest by viewing the display. Similarly, an individual may quickly determine how to drive or walk to an identified service provider location by viewing a map that identifies both the location of the individual and the service provider location. Accordingly, it is useful to provide a display that includes at least mapping information and a marker, e.g., a cursor or other identifier, indicating the position of a mobile resource (column 1 lines 17-42).

Thus, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the combination (Bickford and DeLorme) with the teachings of Buckham to provide a display that would show the position of another moving vehicle and determine a course to intercept.

9. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bickford et al. (US 2004/0236504), in view of Odagawa et al. (US 2005/0143915)

Regarding claims 19 and 20, Bickford discloses a vehicle navigation system which includes a navigation processor that is coupled to a GPS receiver and a user interface. Signals received from the GPS receiver allow the navigation processor to determine the vehicle position and then to calculate navigation solutions, for example, a route from the vehicle's present position to a selected destination, the proximity of POIs relative to the vehicle's present position, or the proximity of POIs relative to the selected destination. The navigation system may also include various interfaces for receiving data regarding POIs, for example, compact disc (CD), digital video disc (DVD), memory card, vehicle data bus, data communications, and wireless interfaces (para 0007).

Further, Bickford discloses that a navigation display which is capable of displaying navigation information, including, for example, destination range and distance, POI direction and distance, turn-by-turn route guidance instructions, selectable POI categories, subcategories, and names of POIs (as shown, for example, in FIG. 5), function labels for programmable pushbuttons 15, etc. Various pushbuttons 13 and key matrix 14 provide user selection of audio entertainment and navigation system functions and provide for selection of displayed menu items and POI information items. Programmable pushbuttons 15 vary in function depending on the selected display or menu, which may include function labels located on display 12 just above the individual programmable pushbuttons 15. CD/DVD receptacle 16 provides for the

Art Unit: 3663

inserting and expelling of removable media such as CDs and DVDs that may be used in connection with both the audio entertainment system and navigation system 10.

Also, figure 5 clearly anticipates the means for generating a specification to retrieve specific data. Figure 5 discloses an overview of an algorithm in which the user can select eating arrangements based on stored or wirelessly received POI data. Additionally, Figure 1 clearly shows the presentation means in a visual display format.

Drawings and pictures can anticipate claims if they clearly show the structure which is claimed. See MPEP 2125.

Next, Bickford discloses that the vehicle speakers 30 are driven by radio/audio processor 28 and may be used not only for audio entertainment listening, but also for audible alerts and voice information and prompts commanded by navigation processor 20 (para 0038). It is well known to those of ordinary skill in the art that many such personal navigation units contain user defined preferences, such as receiving directional information audibly as well as visually.

Lastly, Bickford discloses a priority system in which an alert is sounded and/or displayed by the navigation system if the vehicle's present position and a preferred POI are found to be within the predetermined location relative to the vehicle's present position. If the user selects a POI, the navigation system calculates an intermediate route from the vehicle's present position to the selected POI (para 0010). Additionally, the navigation system is capable of monitoring the vehicle condition and, if vehicle

Art Unit: 3663

service is advisable, can locate nearby POIs providing the required service and calculate a route to a selected POI (para 0011).

For example, the user may select the category gas stations, or brand name Big Tank as a preferred visitation point for which an alert that will become active upon navigation processor 20 receiving data from vehicle bus interface 42 indicating that the vehicle fuel tank is below one-eighth of a tank (para 0062).

Bickford provides for all of the embodiments of claim 19, but does not explicitly disclose using traffic, and weather broadcasts for information in determining route selection, as well as vehicle characteristics.

10. Odagawa, however, teaches a distance sensor 6a which detects the travel distance of the vehicle, and a counter 6b which measures time. The outputs of the distance sensor 6a and counter 6b are each connected to the controller 5. The sensor portion 6 may comprise sensors which detect the vehicle velocity, engine rotation rate, direction of travel, or other operation states, and may also comprise wireless communication equipment to obtain travel information from other vehicles or from an information transmission center (a server providing information).

Thus, it would be obvious to one of ordinary skill in the art to modify the invention of Bickford with that of Odagawa to configure a navigation device to acquire traffic and weather information from multiple sources. Doing so would provide the optimum route for the user.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan M. Dager whose telephone number is 571-270-1332. The examiner can normally be reached on 0830-1800 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3663

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JD

5 October 2007


JACK KEITH
SUPERVISORY PATENT EXAMINER